CLAIMS

1. Mineral wool capable of dissolving in a physiological medium, characterized in that it comprises the constituents below in the following percentages by weight:

SiO_2	39 - 44%, preferably 40 - 43%
Al_2O_3	16 - 27%, preferably 16 - 26%
CaO	6 - 20%, preferably 8 - 18%
MgO	1 - 5%, preferably 1 - 4.9%
Na_2O	0 - 15%, preferably 2 - 12%
K_2O	0 - 15%, preferably 2 - 12%
R_2O (Na_2O + K_2O)	10 - 14.7%, preferably 10 - 13.5%
P_2O_5	0 - 3%, especially 0 - 2%
Fe_2O_3 (total iron)	1.5 - 15%, especially 3.2 - 8%
B_2O_3	0 - 2%, preferably 0 - 1%
TiO_2	0 - 2%, preferably 0.4 - 1%.

2. Mineral wool according to Claim 1, characterized in that the CaO content is between 9.5 and 20%, preferably between 10 and 18%.

3. Mineral wool according to either of the preceding claims, characterized in that it contains 20 to 25% alumina.

4. Mineral wool according to one of the preceding claims, characterized in that it contains at least 2%, especially around 2 to 5%, MgO when alumina is present in an amount of less than 22%, especially from 17 to 22%, and in that it contains 1 to 4%, preferably 1 to 2%, MgO when alumina is present in an amount of at least 22% by weight.

5. Mineral wool according to one of the preceding claims, characterized in that the alkali metal oxide content is preferably less than or equal to 13.0%, especially around 10 to 12.5% and in particular 12% or

less.

6. Mineral wool according to one of the preceding claims, characterized in that the R_2O/Al_2O_3 molar ratio is less than 0.9, especially at most 0.8 and in particular at most 0.75.

7. Mineral wool according to one of the preceding claims, characterized in that it contains 2 to 6% iron oxide.

8. Mineral wool according to one of the preceding claims, characterized in that it contains 1% titanium oxide or less.

9. Mineral wool according to one of the preceding claims, characterized in that it has a viscosity at a temperature of 1400°C of more than 70 poise, especially around 75 to 250 poise.

10. Mineral wool according to one of the preceding claims, characterized in that its composition has a shrinkage at 700°C of less than 40% and a shrinkage at 800°C of less than 90%.

11. Use of a mineral wool according to one of the preceding claims in fire-resistant structural systems or as insulation employed at high temperature.